

M 6.5, 2km ENE of Bulatukan, Philippines

Origin Time: 2019-10-31 01:11:19 UTC (Thu 09:11:19 local)

Location: 6.9079° N 125.1833° E Depth: 10.0 km

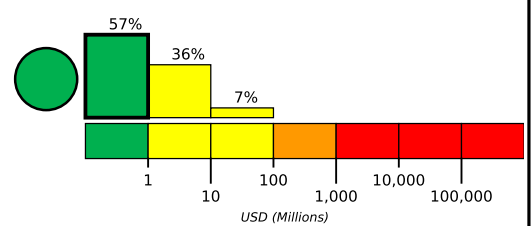
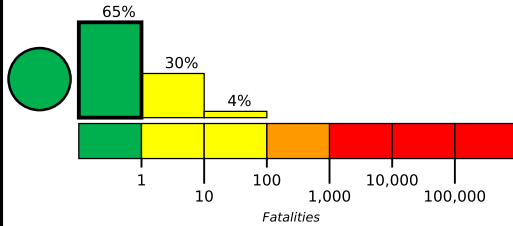
FOR TSUNAMI INFORMATION, SEE: tsunami.gov

Created: 3 weeks, 4 days after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

Estimated Economic Losses

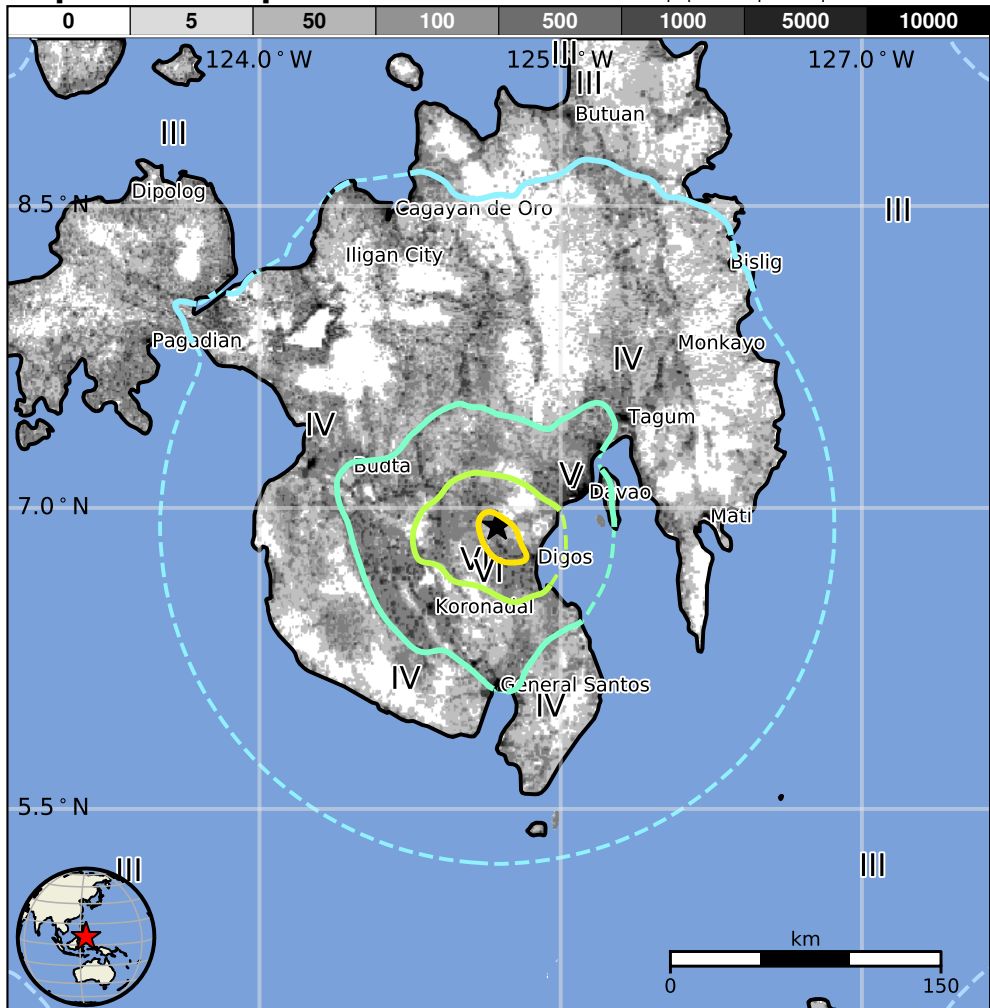


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		—*	4,523k*	10,547k	5,548k	1,169k	383k	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are reinforced concrete and unknown/miscellaneous types construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1987-05-23	128	5.7	VII(70k)	1
1990-02-08	323	6.7	VIII(96k)	1
2002-03-05	145	7.5	VIII(12k)	15

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
VII	Bulatukan	4k
VII	Kisante	5k
VII	Dolo	4k
VII	Malasila	6k
VII	Magsaysay	17k
VII	Bansalan	21k
V	Davao	1,213k
IV	Cotabato	179k
IV	Cagayan de Oro	445k
III	Pagodan	187k
III	Butuan	310k

PAGER content is automatically generated, and only considers losses due to structural damage.

Limitations of input data, shaking estimates, and loss models may add uncertainty.

<https://earthquake.usgs.gov/earthquakes/eventpage/us700061e9#pager>

bold cities appear on map.

(k = x1000)

Event ID: us700061e9